

**Notice of Allowability**

Application No.

10/092,444

Examiner

Cam Y T Truong

Applicant(s)

AKABOSHI ET AL.4

Art Unit

2162

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.


1. ☒ This communication is responsive to 12/27/2005.
2. ☒ The allowed claim(s) is/are 1-17, 19-20.
3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
**SHAHID ALAM**  
**PRIMARY EXAMINER**

Art Unit: 2162

### **DETAILED ACTION**

1. Applicant has amended claims 1, 8, 17-20 in the amendment filed on 12/27/2004.

Claims 1-20 are pending in this Office Action.

### **EXAMINER'S AMENDMENT**

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Richard A. Gollhofer, Registration No. 31,106 on 4/27/2005.

In the claim: Please replace claims 1 and 17, 19-20 with amended claims 1 and 17, 19-20 and canceled claim 18.

1. (Currently Amended) A searching apparatus for searching a set of records for a combination of records, each of the records being composed of a plurality of attributes, the searching apparatus comprising:

a designating device designating a search pattern using a plurality of events and a relation of a sequence of the plurality of events and designating a pattern matching method for matching the search pattern and the combination of records, including as possible pattern matching methods, and all match for returning all combinations of events that match the search pattern, a backward longest match for returning a combination of events whose interval is longest in combinations of events that

Art Unit: 2162

backwardly match the search pattern, and a backward shortest match for returning a combination of events whose interval is the shortest in combinations of events that backwardly matches the search pattern, each of the events defining a particular attribute of a record as a particular value, the relation of the sequence of the events being defined according to a sequential order of attribute values;

a searching device searching the set of records for a combination of records corresponding to the designated search pattern; and

an outputting device outputting a searched result.

17. (Currently Amended) A computer-readable recording medium on which a program is stored causing a computer for searching a set of records for a combination of records, each of the records being composed of a plurality of attributes, to perform:

designating a search pattern using a plurality of events and relation of a sequence of the plurality of events, each of the events defining a particular attribute of a record as a particular value, the relation of the sequence of the events being defined according to a sequential order of attribute values;

designating a pattern matching method for matching the search pattern and the combination of records, including as possible pattern matching methods, and all match for returning all combinations of events that match the search pattern, a backward longest match for returning a combination of events whose interval is longest in combinations of events that backwardly match the search pattern, and a backward

Art Unit: 2162

shortest match for returning a combination of events whose interval is the shortest in combinations of events that backwardly matches the search pattern;

searching the set of records for a combination of records corresponding to the designated search pattern; and

outputting a searched result.

19. (Currently Amended) A search method for searching a set of records for a combination of records, each of the records being composed of a plurality of attributes, the method comprising:

inputting into a computer a search pattern, designated by using a plurality of events and relation of a sequence of the plurality of events, each of the events defining a particular attribute of a record as a particular value, the relation of the sequence of the events being defined according to a sequence order of attribute values; and

designating a pattern matching method for matching the search pattern and the combination of records, including as possible pattern matching methods, and all match for returning all combinations of events that match the search pattern, a backward longest match for returning a combination of events whose interval is longest in combinations of events that backwardly match the search pattern, and a backward shortest match for returning a combination of events whose interval is the shortest in combinations of events that backwardly matches the search pattern.

Art Unit: 2162

20. (Currently Amended) A searching apparatus for searching a set of records for a combination of records, each of the records being composed of a plurality of attributes, the searching apparatus comprising:

designating means for designating a search pattern using a plurality of events and relation of a sequence of the plurality of events and for designating a pattern matching method for matching the search pattern and the combination of records, including as possible pattern matching methods, and all match for returning all combinations of events that match the search pattern, a backward longest match for returning a combination of events whose interval is longest in combinations of events that backwardly match the search pattern, and a backward shortest match for returning a combination of events whose interval is the shortest in combinations of events that backwardly matches the search pattern, each of the events defining a particular attribute of a record as a particular value, the relation of the sequence of the events being defined according to a sequential order of attribute values;

searching means for searching the set of records for a combination of records corresponding to the designated search pattern; and

outputting means for outputting a searched result.

***Allowable Subject Matter***

3. Claims 1-17, and 19-20 are allowed.

The prior art of record, alone or in combination, does not teach or fairly suggest the combination of steps as recited in independent claims 1, 17, 19-20 wherein "all

Art Unit: 2162

match for returning all combinations of events that match the search pattern, a backward longest match for returning a combination of events whose interval is longest in combinations of events that backwardly match the search pattern, and a backward shortest match for returning a combination of events whose interval is the shortest in combinations of events that backwardly matches the search pattern, each of the events defining a particular attribute of a record as a particular value, the relation of the sequence of the events being defined according to a sequential order of attribute values"; and

The prior art of record, alone or in combination, does not teach or fairly suggest the combination of steps as recited in independent claim 8 wherein "a shortest match for returning a combination of events whose interval is the shortest in combinations of events that match the search pattern, a match for repeating the shortest match, all match for returning all combinations of events that match the search pattern, a backward longest match for returning a combination of events whose interval is longest in combinations of events that backwardly match the search pattern, and a backward shortest match for returning a combination of events whose interval is the shortest in combinations of events that backwardly matches the search pattern".

The dependent claims, bring definite, further limiting, and fully enabled by the specification are also allowed.

Art Unit: 2162

***Contact Information***


4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cam Y T Truong whose telephone number is (571) 272-4042 . The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cam-Y Truong

4/28/2005

  
SHAHID ALAM  
PRIMARY EXAMINER